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| 10/806,072 | 03/22/2004 | Mingqi Lu | 20335-00165 | 1395 |

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| EXAMINER | |
|---|---|
| RAMACHANDRAN, UMAMAHESWARI | |

| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/806,072 | LU ET AL. | |
| | Examiner | Art Unit | |
| | UMAMAHESWARI RAMACHANDRAN | 1627 | |

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *23 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *22,25-27 and 29-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22,25-27 and 29-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

The office acknowledges the receipt of the amendments and remarks received in the office on 6/23/2009. Claims 1-21, 23, 24 and 28 have been cancelled. Claims 22, 25-27, 29-48 are pending and are being examined on the merits herein.

### *Response to Remarks*

Applicants' arguments regarding the following 103 rejections, Claims 22, 25-27, 29-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Sallis et al. (U.S. 7,405,222, effective filing date of Jan 25 2002) in view of Yeager et al. (WO 01/51053, publication date 19 July 2001), claims 22, 25-27, 29-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Sallis et al. (U.S. 7,405,222, effective filing date of Jan 25 2002) in view of Yeager et al. (US 2002/0045665, publication date Apr 18 2002), claims 22, 25-27, 29-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty et al. (U.S. 6,037,346) in view of Yeager et al. (WO 01/51053, publication date 19 July 2001), claims 22, 25-27, 29-48 rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty et al. (U.S. 6,037,346) in view of Yeager et al. (US 2002/0045665, publication date Apr 18 2002) have been fully considered and found not to be persuasive. The arguments are addressed in the Response to Arguments section. The rejections are maintained and are given below for Applicants' convenience. Accordingly, the action is made Final.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 22, 25-27, 29-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sallis et al. (U.S. 7,405,222, effective filing date of Jan 25 2002) in view of Yeager et al. (WO 01/51053, publication date 19 July 2001).

Sallis et al. teach a method of treating premature ejaculation comprising administering a vasodilator such as Prostaglandin E1. The reference teaches treating sexual dysfunctions such as erectile dysfunction and premature ejaculation comprising administering a composition comprising prostaglandin E1 (see Abstract, claims). The reference teaches 3-12 µg/ml of prostaglandin E1 for therapeutic administrations.

The reference does not teach administration of the composition meatally or the semi-solid composition comprising anesthetic as claimed in claim 22.

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, p 6, lines 29-37, claims 35-37, 39-46) and water (p 26, lines 1-7). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (p 29, lines 5-20). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (p 28, lines 5-9, p 34, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (p 22, lines 15-36, claim 36) in the composition. The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (p 21, lines 1-36). The reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanoate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-(N,N dimethylamino)-propionate (p 19, lines 17-21). The reference teaches that emulsifiers such as sucrose ester (p 24, line 26), glyceryl monooleate, triolein, trimyristin and tristearin (up to 5%) can be added in the composition (p 28, lines 22-27). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (page 38, line 1). The reference teaches administration of the composition before the intercourse (p 43, lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer meatally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Sallis et al. and Yeager et al. Sallis et al. teach premature ejaculation and erectile dysfunction are male sexual dysfunctions. The reference teaches administration of prostaglandin in a method of treatment of premature ejaculation. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation in expectation of success because Sallis teach administration of prostaglandin E1 in a method of treating premature ejaculation and Yeager teaches a composition comprising prostaglandin E1 and an anesthetic with the thickener and lipophilic components as claimed in the instant application. One having ordinary skill in the art at the time of the invention would have been motivated in administration of prostaglandin E composition in a method of treating premature ejaculation is to achieve therapeutic benefits. Yeager teaches 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin, 0.2 to about 0.3 mg as claimed in claim 25. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to

determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of administering the composition at certain period of time before the intercourse would have been obvious at the time of applicant's invention.

The references do not explicitly teach that method of administration of composition comprising anesthetic and prostaglandin confers the prolongation of ejaculation latency to the patient. It would have been obvious to one of ordinary skill in the art at the time of the invention that composition comprising the same components as claimed when applied to the same set of population will have the same properties and function and hence the ejaculation latency time will be no less than two minutes or will be greater than two minutes and will be prolonged by at least two minutes as claimed in claims 44-46.

Claims 22, 25-27, 29-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sallis et al. (U.S. 7,405,222, effective filing date of Jan 25 2002) in view of Yeager et al. (US 2002/0045665, publication date Apr 18 2002).

Sallis et al. teach a method of treating premature ejaculation comprising administering a vasodilator such as Prostaglandin E1. The reference teaches treating sexual dysfunctions such as erectile dysfunction and premature ejaculation comprising administering a composition comprising prostaglandin E1 (see Abstract, claims). The reference teaches 3-12 µg/ml of prostaglandin E1 for therapeutic administrations.

The reference does not teach administration of the composition meatally or the semi-solid composition comprising anesthetic as claimed in claim 22.

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, claims 17-36) and water (para 0085). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (para 0094). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (para 0051, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (para 0074-76). The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (para 0019, 0125). The reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-

alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanoate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-(N,N dimethylamino)-propionate (para 0052). The reference teaches that emulsifiers such as sucrose ester (para 0081), glyceryl monooleate, triolein, trimyristin and tristearin can be added in the composition (para 0081, 0082). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (para 0130). The reference teaches administration of the composition before the intercourse (para 0154).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer meatally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Sallis et al. and Yeager et al. Sallis et al. teach premature ejaculation and erectile dysfunction are male sexual dysfunctions. The reference teaches administration of prostaglandin in a method of treatment of premature ejaculation. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation in expectation of success because Sallis teach administration of prostaglandin E1 in a method of treating premature ejaculation and Yeager teaches a composition comprising prostaglandin E1 and an anesthetic with the thickener and lipophilic components as claimed in the instant application. One having ordinary skill in the art at the time of the invention would have

been motivated in administration of prostaglandin E composition in a method of treating premature ejaculation is to achieve therapeutic benefits. Yeager teaches 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin, 0.2 to about 0.3 mg as claimed in claim 25. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of administering the composition at certain period of time before the intercourse would have been obvious at the time of applicant's invention.

The references do not explicitly teach that method of administration of composition comprising anesthetic and prostaglandin confers the prolongation of ejaculation latency to the patient. It would have been obvious to one of ordinary skill in the art at the time of the invention that composition comprising the same components as claimed when applied to the same set of population will have the same properties and function and hence the ejaculation latency time will be no less than two minutes or will be greater than two minutes and will be prolonged by at least two minutes as claimed in claims 44-46.

Claims 22, 25-27, 29-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doherty et al. (U.S. 6,037,346) in view of Yeager et al. (WO 01/51053, publication date 19 July 2001).

Doherty teaches treatment of erectile dysfunction comprising administering a phosphodiesterase inhibitor along with an additional agent, a vasoactive agent such as prostaglandin E1 (col. 22, claims 86, 89). The reference teaches that vasoactive agents, particularly vasodilators, are preferred additional agents that include prostaglandin E0, E1 etc (col. 13, lines 39-40, col. 14, lines 1-3). The reference states the term "erectile dysfunction" is intended to include any and all types of erectile dysfunction, including: vasculogenic, neurogenic, endocrinologic and psychogenic impotence, Peyronie's syndrome; priapism, premature ejaculation (PE) and any other condition, disease or disorder, regardless of cause or origin, which interferes with at least one of the three phases of human sexual response, i.e., desire, excitement and orgasm (col. 5, lines 42-54). An applicant is entitled to be his or her own lexicographer

(see MPEP 2111.01). Hence Doherty teaches a method of treating an erectile dysfunction disorder which includes PE disorder by administration of prostaglandin E1. The reference teaches preparing semi solid compositions for local administrations. The reference teaches ointments for topical administration of the composition (col. 9, lines 23-27, col. 13, lines 19-20).

The reference does not teach administration of the composition meatally or the semi-solid composition comprising anesthetic as claimed in claim 22.

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, p 6, lines 29-37, claims 35-37, 39-46) and water (p 26, lines 1-7). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (p 29, lines 5-20). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (p 28, lines 5-9, p 34, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (p 22, lines 15-36, claim 36) in the composition. The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (p 21, lines 1-36). The reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanoate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-

(N,N dimethylamino)-propionate (p 19, lines 17-21). The reference teaches that emulsifiers such as sucrose ester (p 24, line 26), glyceryl monooleate, triolein, trimyristin and tristearin (up to 5%) can be added in the composition (p 28, lines 22-27). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (page 38, line 1). The reference teaches administration of the composition before the intercourse (p 43, lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer meatally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Doherty et al. and Yeager et al. Doherty et al. teach a method of treatment of erectile dysfunction comprising administering a vasoactive agent such as prostaglandin E1. The reference defines erectile dysfunction disorder includes premature ejaculation. Hence Doherty et al. teach that premature ejaculation can be treated comprising administering a vasoactive agent such as prostaglandin E1. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation in expectation of success because of Doherty et al.'s teachings. One having ordinary skill in the art at the time of the invention would have been motivated to administer prostaglandin E composition in a method of treating premature ejaculation is to achieve therapeutic benefits as Doherty and Yeager teaches the benefits of prostaglandin E1 in a method of treating erectile

dysfunction and Doherty defines premature ejaculation as one of the disorders of erectile dysfunction and further teaches a method of treating ED comprising administering a phosphodiesterase inhibitor along with a vasoactive agent. Yeager teaches 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin, 0.2 to about 0.3 mg as claimed in claim 25. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of administering the composition at certain period

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least one of the three phases of human sexual response, i.e., desire, excitement and orgasm (col. 5, lines 42-54). An applicant is entitled to be his or her own lexicographer (see MPEP 2111.01). Hence Doherty teaches a method of treating an erectile dysfunction disorder which includes PE disorder by administration of prostaglandin E1. The reference teaches preparing semi solid compositions for local administrations. The reference teaches ointments for topical administration of the composition (col. 9, lines 23-27, col. 13, lines 19-20).

The reference does not teach administration of the composition meatally or the semi-solid composition comprising anesthetic as claimed in claim 22.

Yeager teach a method of treating erectile dysfunction comprising administering topically a semi-solid composition comprising an anesthetic, prostaglandin E1, a penetration enhancer, a polysaccharide gum (a polymeric thickener), a lipophilic compound (aliphatic C2 to C30 ester), and an acidic buffer system providing a buffered pH value of about 3 to 7.4 (See Abstract, p 6, lines 29-37, claims 35-37, 39-46) and water (p 26, lines 1-7). The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (p 29, lines 5-20). The reference teaches 0.001 to 1 % of prostaglandin E1 and 86 % water/buffer in the composition (p 28, lines 5-9, p 34, Table 3). The reference teaches polyacrylic acid polymer as a suitable polymeric thickener (p 22, lines 15-36, claim 36) in the composition. The reference teaches galactomannan gum as a polysaccharide gum and modified gums in the composition (p 21, lines 1-36). The reference teach that the penetration enhancer is an alkyl-2-(N,N-disubstituted amino)-

alkanoate ester, an (N,N-disubstituted amino)-alkanol alkanoate, or a mixture of these and exemplary specific alkyl-2-(N,N-disubstituted amino)-alkanoates include dodecyl 2-(N,N dimethylamino)-propionate (p 19, lines 17-21). The reference teaches that emulsifiers such as sucrose ester (p 24, line 26), glyceryl monooleate, triolein, trimyristin and tristearin (up to 5%) can be added in the composition (p 28, lines 22-27). The reference teaches a clinical supply of single dose containing 1.0 mg of prostaglandin E1 with 250 mg of net weight of cream (page 38, line 1). The reference teaches administration of the composition before the intercourse (p 43, lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention to administer meatally a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system because of the teachings of Doherty et al. and Yeager et al. Doherty et al. teach a method of treatment of erectile dysfunction comprising administering a vasoactive agent such as prostaglandin E1. The reference defines erectile dysfunction disorder includes premature ejaculation. Hence Doherty et al. teach that premature ejaculation can be treated comprising administering a vasoactive agent such as prostaglandin E1. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation in expectation of success because of Doherty et al.'s teachings. One having ordinary skill in the art at the time of the invention would have been motivated to administer prostaglandin E composition in

a method of treating premature ejaculation is to achieve therapeutic benefits as Doherty and Yeager teaches the benefits of prostaglandin E1 in a method of treating erectile dysfunction and Doherty defines premature ejaculation as one of the disorders of erectile dysfunction and further teaches a method of treating ED comprising administering a phosphodiesterase inhibitor along with a vasoactive agent. Yeager teaches 1.0 mg of prostaglandin E1 in a single dose administration. The references fail to specifically teach the amount of prostaglandin, 0.2 to about 0.3 mg as claimed in claim 25. The amount of administration in a method of treatment is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. Optimization of parameters is a routine practice that would be obvious for a person of ordinary skill in the art to employ. It would have been customary for an artisan of ordinary skill to determine the optimal amount of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of dosage amount would have been obvious at the time of applicant's invention. The reference does not specifically teach administering the composition about 2 to 30 or 5-20 minutes before the sexual intercourse. It would have been obvious to one of ordinary skill in the art at the time of the invention to have administered the composition in a method of treatment of premature ejaculation a certain time or period before the sexual intercourse because the time of administration is a parameter that can be routinely optimized. It would have been customary for an artisan of ordinary skill to determine timing of dosage in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the

claimed parameters, this optimization of administering the composition at certain period of time before the intercourse would have been obvious at the time of applicant's invention.

The references do not explicitly teach that method of administration of composition comprising anesthetic and prostaglandin confers the prolongation of ejaculation latency to the patient. It would have been obvious to one of ordinary skill in the art at the time of the invention that composition comprising the same components as claimed when applied to the same set of population will have the same properties and function and hence the ejaculation latency time will be no less than two minutes or will be greater than two minutes and will be prolonged by at least two minutes as claimed in claims 44-46.

***Response to Arguments***

Applicants' argue that "A careful review of the file history of the Sallis et al. reference and the priority document USSN 60/351,634 provided no further evidence to resolve the contradictory descriptions of composition F6 in the Sallis et al. reference. Therefore, the Applicant submits that there is no unambiguous teaching of the Sallis et al. reference regarding the diagnosis or treatment of premature ejaculation using compositions containing prostaglandin E". In response, Sallis reference in col. 3, lines 1-3 in summary and in col. 4. in detailed description (lines 50-54) teaches that the invention provides a method of treating sexual dysfunction in a male mammal that includes administering by ICP a pharmaceutical composition of one or more agents in an amount effective to cause the male to sustain an erection. Furthermore, the

reference in col. 4, lines 62-65 teaches that the sexual dysfunction include erectile dysfunction (EI) and premature ejaculation (PE). In col. 9, lines 9-15, the reference teaches that the invention further provides a method of providing treatment of male sexual dysfunction in a population of male subjects and the method includes the steps of (a) assessing the general, physical and psychological condition of each subject; b) formulating a test dose of a pharmaceutical composition of one or more agents in an amount effective to cause said subject to sustain an erection. As pointed out by the Applicants' in the arguments F6 can be a diluted version of F2 containing the same four vasodilators. The reference teaches the test formulations can contain one or more of the agents and they have shown example formulations F1-F6 and in chart 2, F6 is diluted F4 for use with PE patients. This is one of the examples provided in the reference with F6. It does not necessarily mean that the formulation for treating a sexual dysfunction cannot have all the four vasodilators or a vasodilator such as PGE1. Chart 2 is an example of determining effective doses of formulations for treating sexual dysfunction and not necessarily means that only diluted F4 -F6 formulation is useful in treating PE. The reference teaches in several places (Summary, col. 3, lines 1-3, 21-27, col. 4, lines 7-19, lines 50-53, 62-65 etc) that one or more vasodilators can be used in treating sexual dysfunction and PE is one of the sexual dysfunctions stated. Hence it is very clear from the teachings of Sallis et al. reference that treatment of sexual dysfunction including premature ejaculation can be treated using a composition comprising one or more of vasodilators including PGE1, papaverine, phentolamine and atropine.

Applicants' argue that "Even if there were an unambiguous teaching in Sallis et al. regarding the diagnosis or treatment of premature ejaculation using compositions containing prostaglandin EI, one of ordinary skill in the art would not be led to combine the teachings of the Sallis et al. reference and the teachings of the Yeager et al. WO 01/51053 reference to arrive at the presently claimed invention because the Sallis et al. reference teaches a different mode of administration than either the Yeager et al. WO 01/51053 reference or the presently claimed invention. In response, type or route of administration is clearly a result effective parameter that a person of ordinary skill in the art would routinely optimize. It is well within the skilled medical professional to determine the suitable route of administration. Also, the type of administration depends on the specific activity of the particular compound, on the desired therapeutic effect to be achieved, on the condition of the patient, on the frequency of administration and the like factors and such type of administration which are advantageous are selected to provide the desired therapeutic effect, preferably substantially without unduly harming or interfering with the patient. It would have been customary for an artisan of ordinary skill to determine the optimal route of administration in order to best achieve the desired results. Thus, absent some demonstration of unexpected results from the claimed parameters, this optimization of route of administration would have been obvious at the time of applicant's invention.

Applicants' argue regarding the statement in the rejection in the Office Action, page 9, lines 9-14. In response, Sallis et al. teach premature ejaculation and erectile dysfunction are male sexual dysfunctions. The reference teaches use of at least one of

four vasodilators including prostaglandin in a method of treating a male sexual dysfunction including premature ejaculation. Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. One having ordinary skill in the art would have been motivated to administer the composition of Yeager in a method of treatment of premature ejaculation in expectation of success because Sallis teach the use of at least one of four vasodilators including prostaglandin E1 in a method of treating a sexual dysfunction including premature ejaculation and Yeager teaches a composition comprising prostaglandin E1 and an anesthetic with the thickener and lipophilic components as claimed in the instant application. One having ordinary skill in the art at the time of the invention would have been motivated in administration of prostaglandin E composition in a method of treating premature ejaculation is to achieve therapeutic benefits. Yeager teaches 1.0 mg of prostaglandin E1 in a single dose administration. The reference teach addition of topical anesthetics such as lidocaine, fragrances such as myrtenol (up to 5 %), and preservatives in the composition (p 29, lines 5-20) and also teaches that the formulation can be made with 0.001 to 1 % of prostaglandin E1. Accordingly, from the combined teachings of Sallis and Yeager it would have been obvious to one having ordinary skill in the art that at least one of the vasodilator including prostaglandin E1 can be used in a method of treating a sexual dysfunction including premature ejaculation and erectile dysfunction and a composition comprising prostaglandin E, anesthetic, a polymeric thickener in the amounts as

claimed in claim 22. Hence administration of the composition as claimed will have the same therapeutic effects as claimed in claims 44-46 of the instant application.

Applicants' argue that premature ejaculation (PE) is not an erectile dysfunction disorder and would not have been obvious to one of ordinary skill in the art at the time of the invention that PE is an erectile dysfunction from the literature even though Doherty states PE as one of the erectile dysfunction disorder. In response, it would have been obvious to one having ordinary skill in the art at the time of the invention from the teachings of Doherty et al. a male sexual dysfunction disorder such as PE can be treated using a formulation comprising a phosphodiesterase inhibitor, an additional active agent such as PGE1. As stated above, Yeager teach a composition comprising anesthetic, prostaglandin E1, a polymeric thickener, a lipophilic component and a buffer system for the treatment of erectile dysfunction. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention that PE can be treated administering a composition comprising a vasodilator and a topical anesthetic.

**Conclusion**

No claims are allowed.

The rejection from the previous office action is maintained. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umamaheswari Ramachandran whose telephone number is 571-272-9926. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SREENI PADMANABHAN/

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